REMARKS

I. General

Claims 1-40 were pending in the present application, and all of the claims are rejected by the current Office Action (mailed September 25, 2006). The issues raised in the current Office Action are:

- Claims 29-36 are rejected under 35 U.S.C. § 101 as being directed to non-statutory matter.
- Claims 1-2, 6-8, 23-25, 29-33, and 37-39 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,991,811 to Ueno et al. (hereinafter "*Ueno*").
- Claims 11, 14, 15, 17, and 20-22 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,910,024 to Krishnamurthy et al. (hereinafter "*Krishnamurthy*").
- Claims 3-5, 9-10, 12-13, 16, 18-19, 26-28, 34-36, and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Ueno* in view of *Krishnamurthy*.

Applicant hereby traverses all outstanding rejections and respectfully requests reconsideration and withdrawal in light of the following remarks.

II. Amendments

Claims 10, 11, 13, and 17 are amended, claims 12 and 18 are canceled without prejudice, and new claims 41-42 are added herein. No new matter is presented by these claim amendments and newly added claims.

Claim 10 is amended to correct a clear typographical error by changing "doe" to "does". This is intended as merely a cosmetic change and is not intended to narrow the scope of the claim.

Claim 11 is amended to include the elements originally presented in dependent claim 12, which depended from claim 11. Therefore, claim 11 is amended to effectively rewrite original

claim 12 in independent form. Thus, the amendment to claim 11 is not intended to narrow the original scope afforded to claim 12 in any way, and thus claim 11 should be afforded the full scope afforded original claim 12. In view of the amendment to claim 11, claim 12 is canceled without prejudice. Also, the dependency of claim 13 is changed from canceled claim 12 to claim 11, which is not intended as a narrowing amendment to claim 13.

Claim 17 is amended to include the elements originally presented in dependent claim 18, which depended from claim 17. Therefore, claim 17 is amended to effectively rewrite original claim 18 in independent form. Thus, the amendment to claim 17 is not intended to narrow the original scope afforded to claim 18 in any way, and thus claim 17 should be afforded the full scope afforded original claim 18. In view of the amendment to claim 17, claim 18 is canceled without prejudice.

New claims 41-42 are added, where claim 41 depends from claim 1 and claim 42 depends from claim 17. Support for the newly added claims can be found, inter alia, paragraphs 0120-0122 of the specification of the present application.

III. The 35 U.S.C. § 101 Rejections

Claims 29-36 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. The Office Action appears to contend that these claims are directed to "a signal encoded with functional descriptive material", *see* page 2 of the Office Action. Applicant respectfully disagrees and submits that the claims are directed to proper statutory subject matter under 35 U.S.C. §101, as discussed below.

Applicant respectfully asserts that the rejected language of claims 29-36, which recite "Computer-executable software stored to a computer-readable medium", are not merely directed to a signal. Instead, claims 29-36 are directed to a well-accepted type of claim, *see e.g.*, *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995). M.P.E.P. §2106 further explains that "When functional descriptive material is recorded on some computer-readable medium it becomes

structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized."

In support of the rejection, the Examiner directs Applicant's attention to the Official Gazette Notices dated 22 November 2005, under Guidelines for Subject Matter Eligibility, *see* page 4 of the Office Action. However, such Guidelines explain:

> Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. (Emphasis added).
>
> Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. (Emphasis added). See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Thus, this makes clear that when, as in the present case, claims are directed to computer-executable software code that is stored to a computer-readable medium, such claims are statutory. Accordingly, claims 29-36 are directed to proper statutory subject matter, and therefore Applicant requests that this rejection of these claims be withdrawn.

IV. Rejections Under 35 U.S.C. §102 over *Ueno*

Claims 1-2, 6-8, 23-25, 29-33, and 37-39 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Ueno*. To anticipate a claim under 35 U.S.C. § 102, a single reference must teach every element of the claim, *see* M.P.E.P. § 2131. As discussed further below, Applicant respectfully submits that claims 1-2, 6-8, 23-25, 29-33, and 37-39 are not anticipated by *Ueno* because *Ueno* fails to teach each and every element of the claims.

Independent Claim 1

Independent claim 1 recites:

> A method for managing admission of requests to a streaming media server, the method comprising:
> receiving a new request for a streaming media file to be served by a streaming media server;
> performing a resource availability check for the streaming media server to determine whether the streaming media server has sufficient available resources to service the new request; and
> performing a quality of service guarantee check for the streaming media server to determine whether acceptance of the new request will violate, at any point in the future, a desired quality of service provided by the streaming media server for any previously accepted requests. (Emphasis added).

Ueno fails to teach at least the above-emphasized element of claim 1. That is, as discussed below, *Ueno* fails to teach performing a quality of service guarantee check for a streaming media server to determine whether acceptance of a new request will violate, at any point in the future, a desired quality of service provided by the streaming media server for any previously accepted requests.

Ueno proposes a "method for decreasing communication costs particularly when the service of storage type data such as VOD [video on demand] is offered in real time." Col. 7, lines 61-63 of *Ueno*. *Ueno* proposes a technique in which an information source (e.g., a movie) is transmitted from a server to a client. As shown in Fig. 2 of *Ueno*, the transmission technique communicates the information source (stored to storage unit 201) from a server 200 to a

headend 212, which in turn communicates the information source to set-top unit 211 of a client. The transmission technique for sending the information source from storage unit 201 of server 200 to headend 212 uses two different classes of communication for such transmission. First, the server 200 begins sending to the headend 212 (via port 201a) the information source from the information source's beginning toward its end (i.e., "forward playing") using an expensive class of communication that guarantees real time communication, such as CBR. Also, the server 200 uses a less expensive class of communication, such as a best effort class (e.g., ABR or UBR), to begin transmitting to the headend 212 (via port 201b) the information source from the information source's end toward its beginning (i.e., "reverse playing"). The reverse playing portion of the information source that is transmitted using a best effort class of communication is stored at storage 207 of headend 212 until the forward playing portion reaches such stored portion. Once the forward playing portion of the transmission (e.g., being communicated using guaranteed real-time communication class via port 201a) reaches the portion of the information source that is stored in storage 207, the communication from server 200 to headend 212 can be terminated and switch 209 of headend 212 causes headend 212 to begin communicating the remainder of the information source from storage unit 207 to set-top unit 211. Thus, a portion of the communication from server 200 to headend 212 can be via a less expensive class of communication (e.g., best effort classes ABR or UBR), thereby reducing the overall cost of the communication between the server 200 and headend 212. *Ueno* explains this transmission technique at col. 7, line 64- col. 8, line 29 as follows:

> A server system, which has received a demand for the offer of image, begins the offer of information to a receiving apparatus, which has transmitted the demand, in real time in the forward direction from the beginning of an information source such as a movie. As the quality in this case, the real-time characteristic and the low cell-discarding characteristic are required. Therefore, a class of a sufficiently guaranteed quality, such as the CBR, is used. On the other hand, at the same time as the offer of call, an information, which is not required to be offered in real time, is transmitted to the same receiving apparatus, for example, in the retrospective direction from the end of the information source, using a best effort communication class, such as the ABR and the UBR, as a second communication line, which is inexpensive although it is in non real time.

> The receiving apparatus transfers the real-time information transferred through the CBR, to the downward thereof as it is. On the other hand, the non-real-time information transferred through the best effort is being stored in a storage device, and the call for the high-quality class for real-time is released at the point of time when the non-real-time information reaches the same information as the real-time information. The information after that point of time is not required to be transferred through the CBR since it has been already stored in the storage device.
>
> That is, if it is assumed that one information source is transferred, the portion of information transferred through the second-class communication line is unnecessary as the period of time for requesting to ensure the call of a high-quality class, and the transfer can be carried out at a low communication cost by that portion. In particular, if the second communication line is the best effort class, the transfer can be extremely effectively carried out.

Ueno describes at col. 18, lines 18-54, for example, that there are limits on the number of simultaneous user accesses of the same video source. For instance, col. 18, lines 35-51 explains:

> Since there are upper limits with respect to the number of simultaneous accesses to the same video source and the number of users to which services are able to be offered at the same time for each server, a new demand for service is not able to be accepted when they have already reached the upper limits.... Since there are upper limits in the bands of transmission lines and the buffer capacities of exchange nodes, a new channel is not able to be established when they have already reached the upper limits.

This appears to suggest that a resource availability check may be performed to determine whether sufficient resources (e.g., bands of transmission lines) are available to service a new request. However, *Ueno* fails to teach performing a quality of service guarantee check for a streaming media server to determine whether acceptance of a new request will violate, at any point in the future, a desired quality of service provided by the streaming media server for any previously accepted requests, as is further recited by claim 1. *Ueno* appears to merely evaluate whether a pre-set upper limit on the resources (e.g., transmission lines) is reached in determining whether to accept a new request. *Ueno* does not evaluate whether acceptance of the new request will violate a desired quality of service for any previously accepted requests. Indeed, *Ueno* appears to suggest that the upper limits are set such that if not reached it can be assumed that acceptance of a new request will not impact already accepted requests. In any case, *Ueno* simply

provides no teaching whatsoever of performing a quality of service guarantee check to determine if acceptance of a new request will cause violation of a desired quality of service for any previously accepted requests. Again, an analysis of the impact on the quality of service for already accepted requests is not performed in determining whether to accept a new request in *Ueno*.

The current Office Action cites to Col. 16, line 49 – col. 17, line 26 of *Ueno* as teaching this element of claim 1, *see* page 5 of the Office Action. The cited portion of *Ueno* provides:

> In this preferred embodiment, a real-time data is transmitted via a single line 713, which offers the ABR service class. In the ABR, parameters such as a guaranteed minimum transmission rate (which will be hereinafter referred to as "MinR") and a peak rate (which will be hereinafter referred to as "PeakR") are reported to establish communication. That is, if there is room in bands after ensuring at least the bands of the MinR, the transmission rate up to the PeakR is able to be obtained. Therefore, it is assumed that the transmission rate for reproducing a transmitted real-time data in real time is Rr. If the report and transmission are performed so that Rr≤MinR, the arrival of data at the receiving side is not delayed from the required time. In this method, the real-time data is transmitted to the input port of a FIFO 707. The read-out rate at the output of the FIFO 707 is determined by the principle described in FIG. 5, and it is read out at a rate of Rr to be inputted to a decoder 712 to be reproduced in real time. In the FIFO 707, integrated values of actual transmission rates Rr are stored. When the transmission of all the data from the transmitting side is finally completed, this data of the integrated values corresponds to the portion which has been able to be transmitted by the room for bands in the network, so that it is possible to naturally transmit that portion at a lower cost than that of the transmission via the CBR. The quantity of data stored in the FIFO 707 is monitored by stored-data quantity monitoring means 719. On the basis of this quantity of stored data, the scope of transmission rate exceeding the MinR on the transmitting side is controlled by a control signal by means of communication control means 718 and 717, in order to prevent the FIFO 707 from overflowing when the capacity of the FIFO 707 is less than the capacity (=T(1-MinR/PeakR), T: quantity of all data) for storing all the maximum values of the finitely transmitted real-time data. The most simple method is a method for controlling the transmission rate on the transmitting side so as to be the MinR after the FIFO 707 becomes a certain value Th1. This state is shown in FIG. 8. The Th1 is derived from the following formulae:

$$F = N / MinR * (MinR - Rr) + Th1$$

$$N = T - Rr * t - Th1$$

wherein F: Capacity of FIFO, t: Reproduction Time up to the Present, and N: Quantity of Data remaining at Transmitting Side.

This appears to describe a transmission technique using a best effort class of communication (e.g., ABR) to communicate data according to certain transmission rate parameters (e.g., set between MinR and PeakR). The receiving set-top unit stores the received data to a FIFO 707, and the transmission rate of the data to the set-top unit is controlled such that the FIFO 707 does not overflow. Thus, this merely describes controlling transmission rate of data from a server to a set-top unit to enable the FIFO on the set-top unit to handle the received data without overflowing. This in no way teaches performing a quality of service guarantee check to determine if acceptance of a new request will cause violation of a desired quality of service for any previously accepted requests. Instead, this portion of *Ueno* merely addresses controlling the transmission rate of a given stream so that the stream can be handled by the FIFO of a set-top unit, without any consideration of the quality of service of other previously accepted requests. Again, an analysis of the impact on the quality of service for already accepted requests is not performed in determining whether to accept a new request in *Ueno*.

In view of the above, *Ueno* fails to teach all elements of claim 1, and therefore the rejection of claim 1 should be withdrawn.

Independent Claim 23

Independent claim 23 recites:

> A method comprising:
> receiving, at a time T_{cur}, a new request for a streaming file to be served by a media server;
> creating a segment-based model of the media server's memory as of time T_{cur}; and
> based at least in part on the segment-based model of the media server's

memory, determining whether to accept the received request for service by the media server. (Emphasis added).

Ueno fails to teach at least the above-emphasized elements of claim 23. That is, as discussed below, *Ueno* fails to teach creating a segment-based model of a media server's memory as of the time T_{cur} at which a new request for a streaming media file is received by the media server. Further, *Ueno* fails to determine whether to accept the new request based at least in part on such a segment-based model.

Ueno provides no teaching of creating a segment-based model of a media server's memory as of the time T_{cur} at which a new request for a streaming media file is received by the media server. *Ueno* does not appear to teach any model of a media server's memory, and certainly not a segment-based model of such memory. The current Office Action (at page 7 thereof) cites to col. 11, lines 10-25, col. 8, lines 1-11, and col. 16, line 49 - col. 17, line 26 of *Ueno* as teaching creating such a segment-based model of a media server's memory. As discussed below, the cited portions of *Ueno* provide no such teaching.

First, as discussed above with claim 1, col. 16, line 49 – col. 17, line 26 of *Ueno* merely describes controlling transmission rate of data from a server to a set-top unit to enable the FIFO on the set-top unit to handle the received data without overflowing. This in no way teaches creating a segment-based model of a media server's memory. Indeed, this fails to teach creating any model of a media server's memory whatstoever.

Further, col. 11, lines 10-25 of *Ueno* provides:

> While it has been described that the source is transmitted from the output port 201b in order from the end, it is not always required to be transmitted in order from the very end in the case of a long source, but the whole source may be divided into a number of parts to perform the aforementioned transmission with respect to each part. In this case, the switching of the stream, the setting of connection and the disconnection as set forth above are repeated by the number of the division. In the aforementioned preferred embodiment, while the data stored in the storage unit has been transmitted at the same time as the transmission of the data reproduced in real time, it is considered that the data stored therein are not

> always transmitted at the same time so that they have been previously stored. This is the case that, for example, the storage unit is commonly used by a plurality of clients, and when a client accesses the program watched by a previous client, the data stored for the previous client have been already stored in the storage unit to be reused.

As can be clearly seen, this does not provide any teaching whatsoever of creating a model of a media server's memory, and certainly fails to teach creating a segment-based model of the media server's memory as recited by claim 23.

Further, col. 8, lines 1-11 of *Ueno* provides:

> As the quality in this case, the real-time characteristic and the low cell-discarding characteristic are required. Therefore, a class of a sufficiently guaranteed quality, such as the CBR, is used. On the other hand, at the same time as the offer of call, an information, which is not required to be offered in real time, is transmitted to the same receiving apparatus, for example, in the retrospective direction from the end of the information source, using a best effort communication class, such as the ABR and the UBR, as a second communication line, which is inexpensive although it is in non real time.

As can be clearly seen, this further portion of *Ueno* also does not provide any teaching whatsoever of creating a model of a media server's memory, and certainly fails to teach creating a segment-based model of the media server's memory as recited by claim 23. Instead, this portion of *Ueno* merely describes that different classes of communication, such as guaranteed quality class (e.g., CBR) and best effort class (e.g., ABR and UBR) can be used for communicating data.

Further, because no such segment-based model of the media server's memory is created in *Ueno*, *Ueno* fails to teach determining whether to accept a new request based at least in part on such a segment-based model.

In view of the above, *Ueno* fails to teach all elements of claim 23, and therefore the rejection of claim 23 should be withdrawn.

Independent Claim 29

Independent claim 29 recites:

> Computer-executable software stored to a computer-readable medium, the computer-executable software comprising:
> code for creating a segment-based model of a media server's memory; and
> code for determining whether to serve a requested streaming file from the media server based at least in part on the segment-based model of the media server's memory. (Emphasis added).

As discussed above with claim 23, *Ueno* fails to teach creating a segment-based model of a media server's memory, and thus also fails to teach determining whether to serve a requested streaming file from the media server based at least in part on the segment-based model. Therefore, , *Ueno* fails to teach all elements of claim 29, and therefore the rejection of claim 29 should be withdrawn.

Independent Claim 37

Independent claim 37 recites:

> A cost-aware admission control system comprising:
> means for receiving, at a time T_{cur}, a new request for a streaming file to be served by a media server;
> means for creating a segment-based model of the media server's memory as of time T_{cur}; and
> means for determining, based at least in part on the segment-based model of the media server's memory, whether to accept the received request for service by the media server. (Emphasis added).

As discussed above with claim 23, *Ueno* fails to teach creating a segment-based model of a media server's memory, and thus also fails to teach determining whether to accept a received request based at least in part on the segment-based model. Therefore, , *Ueno* fails to teach all elements of claim 37, and therefore the rejection of claim 37 should be withdrawn.

Dependent Claims

Dependent claims 2, 6-8, 24-25, 30-33, and 38-39 each depend either directly or indirectly from their respective independent claims 1, 23, 29, and 37 and, thus, inherit all of the limitations of their respective independent claims. It is respectfully submitted that dependent claims 2, 6-8, 24-25, 30-33, and 38-39 are allowable at least because of their dependence from their respective base claims for the reasons discussed above. Accordingly, Applicant respectfully requests the withdrawal of the rejection of claims 2, 6-8, 24-25, 30-33, and 38-39.

V. Rejections Under 35 U.S.C. §102 over *Krishnamurthy*

Claims 11, 14, 15, 17, and 20-22 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Krishnamurthy*. As discussed above, independent claim 11 is amended herein to include the elements of claim 12, and independent claim 17 is amended herein to include the elements of claim 18. Because claims 12 and 18 are rejected in the present Office Action as under 35 U.S.C. § 103(a) as being unpatentable over *Ueno* in view of *Krishnamurthy*, Applicant addresses those rejections below as they now apply to claims 11 and 17. Because claims 14-15 depend from claim 11 and claims 20-22 depend from claim 17, those claims are also addressed below.

VI. Rejections Under 35 U.S.C. §103 over *Ueno* in view of *Krishnamurthy*

Claims 3-5, 9-10, 12-13, 16, 18-19, 26-28, 34-36, and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Ueno* in view of *Krishnamurthy*. As mentioned above, independent claim 11 is amended to include the elements of claim 12, and independent claim 17 is amended to include the elements of claim 18. Therefore, these independent claims are addressed below with regard this rejection raised for claims 12 and 18.

To establish a prima facie case for obviousness under 35 U.S.C. § 103(a), three basic criteria must be satisfied. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art,

to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the applied art must teach or suggest all the claim elements. M.P.E.P. § 2143. Without conceding any other criteria, Applicant respectfully asserts that the applied combination fails to teach or suggest all elements of the claims.

Claims 3-5, 9-10, 26-28, 34-36, and 40

First, claims 3-5, 9-10, 26-28, 34-36, and 40 each depend either directly or indirectly from their respective independent claims 1, 23, 29, and 37 and, thus, inherit all of the limitations of their respective independent claims. As discussed above, *Ueno* fails to teach all elements of independent claims 1, 23, 29, and 37. *Krishnamurthy* is not relied upon as teaching or suggesting the above-noted deficiencies of *Ueno*, nor does it do so. Thus, it is respectfully submitted that dependent claims 3-5, 9-10, 26-28, 34-36, and 40 are allowable at least because of their dependence from their respective base claims for the reasons discussed above.

Independent Claim 11

Independent claim 11 recites:

> A method for managing admission of requests to a media server, the method comprising:
> receiving a new request for a streaming file to be served by a media server;
> determining a cost to the media server for serving the requested streaming file, wherein the cost corresponds to the media server's resources to be consumed in serving the requested streaming file, and wherein said determining said cost comprises
> determining a segment-based memory model that identifies content of the media server's memory as of a time that the new request is received, and
> using the segment-based memory model to determine whether at least a portion of the requested streaming file is in the media server's memory; and
> determining, based at least in part on the cost, whether to admit the new request for service by the media server. (Emphasis added).

The applied combination of *Ueno* and *Krishnamurthy* fails to teach or suggest at least the above-emphasized elements of claim 11. In treating claim 12, the current Office Action (at page 16 thereof) cites to portions of *Ueno* and portions of *Krishnamurthy* as teaching determining a segment-based memory model that identifies content of the media server's memory as of a time that the new request is received. As discussed above with claim 23, *Ueno* fails to teach or suggest determining such a segment-based memory model. Further, *Krishnamurthy* fails to teach or suggest this element, as discussed below.

The current Office Action (at page 16 thereof) cites to col. 2, lines 43-51 of *Krishnamurthy* as teaching determining a segment-based memory model that identifies content of the media server's memory as of a time that the new request is received. Col. 2, lines 43-51 of *Krishnamurthy* makes no mention of determining a memory model of a media server's memory at all, and certainly fails to teach or suggest determining a segment-based memory model as recited by claim 11. For instance, col. 2, lines 43-51 of *Krishnamurthy* merely provides:

> Additionally, the network resources are monitored and are configured to provide a plurality of predictable and dynamically variable quality of service levels, with each quality of service level guaranteeing a particular combination of network resources and including a price of service. The price of service of each quality of service level is set to optimize the admission of transmission data through the network and to avoid congestion within the network.

This makes no mention whatsoever of determining any memory model of a media server's memory. Applicant fails to see any teaching or suggestion in *Krishnamurthy* of a segment-based memory model as recited by claim 11.

In view of the above, the combination of *Ueno* and *Krishnamurthy* fails to teach or suggest all elements of claim 11, and therefore the rejection of claim 11 should be withdrawn.

Independent Claim 17

Independent claim 17 recites:

> A system comprising:
> server having a memory, wherein said server is operable to serve at least one streaming file to clients communicatively coupled thereto; and
> an admission controller operable to receive a new request for a streaming file to be served by said server, determine a cost to the server for serving the requested streaming file, wherein the cost corresponds to the server's resources to be consumed in serving the requested streaming file, and determine, based at least in part on the cost, whether to admit the new request for service by the server;
> wherein said admission controller is further operable to determine a segment-based memory model that identifies content of the server's memory as of a time that the new request is received, and said admission controller is operable to use the segment-based memory model to determine whether at least a portion of the requested streaming file is in the server's memory. (Emphasis added).

The applied combination of *Ueno* and *Krishnamurthy* fails to teach or suggest at least the above-emphasized elements of claim 17. In treating claim 18, the current Office Action (at page 17 thereof) cites to portions of *Ueno* and portions of *Krishnamurthy* as teaching determining a segment-based memory model that identifies content of the server's memory as of a time that the new request is received. As discussed above with claim 23, *Ueno* fails to teach or suggest determining such a segment-based memory model. Further, *Krishnamurthy* fails to teach or suggest this element, as discussed below.

The current Office Action (at page 17 thereof) cites to col. 2, lines 43-51 of *Krishnamurthy* as teaching determining a segment-based memory model that identifies content of the server's memory as of a time that the new request is received. As discussed above with claim 11, *Krishnamurthy* fails to teach or suggest determining such a memory model.

In view of the above, the combination of *Ueno* and *Krishnamurthy* fails to teach or suggest all elements of claim 17, and therefore the rejection of claim 17 should be withdrawn.

Dependent Claim 13-16 and 19-22

Claims 13-16 and 19-22 each depend either directly or indirectly from their respective independent claims 11 and 17 and, thus, inherit all of the limitations of their respective independent claims. Thus, it is respectfully submitted that dependent claims 13-16 and 19-22 are allowable at least because of their dependence from their respective base claims for the reasons discussed above.

VII. New Claims 41-42

New claims 41-42 each depend from their respective independent claims 1 and 17 and, thus, inherit all of the limitations of their respective independent claims. Thus, it is respectfully submitted that dependent claims 41-42 are allowable at least because of their dependence from their respective base claims for the reasons discussed above.

VIII. Conclusion

In view of the above, Applicant believes the pending application is in condition for allowance. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-2025, under Order No. 200311046-1 from which the undersigned is authorized to draw.

Dated: December 22, 2006

Respectfully submitted,

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